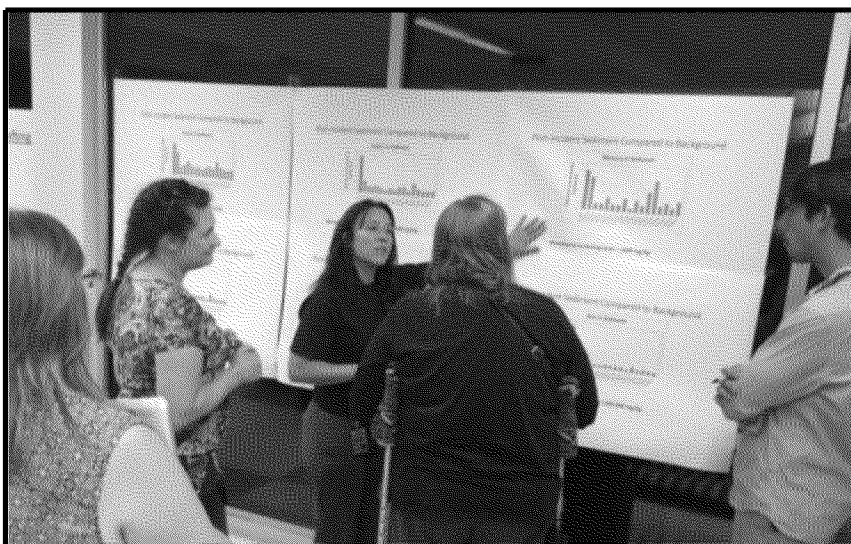


U.S. ENVIRONMENTAL PROTECTION AGENCY  
AREA COMMAND EXECUTIVE SUMMARY / SITUATION REPORT  
2015 Gold King Mine Release



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Area Command (EPA Regions 8, 6, and 9)



Public meeting held in Durango, Colorado on August 20, 2015.

**Subject:** EXECSUM / SITREP #10  
Gold King Mine Release

San Juan County, Colorado  
Latitude: 37.8945 Longitude: -107.6384

**From:** Area Command Situation Unit  
**Date:** 08/21/2015  
**Reporting Period:** 08/20/2015 0700 through 08/21/2015 0700  
**Website:** [www.epa.gov/goldkingmine](http://www.epa.gov/goldkingmine)

## **Executive Summary**

For Internal Use Only  
Gold King Mine Release  
EPA Executive Summary: August 21, 2015 1900

### **Situation Summary**

EPA Area Command (AC), comprised of EPA Regions 6, 8, and 9 is continuing strategic management over all Unified Incident Command Posts (ICPs) involved with the response.

### **Highlights, Key Updates/Changes**

- AC provided logistics and support for a public meeting by two staff members of Senator Barrasso's office and one representative from Senator Udall's office.
- AC Resources continued to work out details of the planned relocation of the Durango, CO Incident Command Post.
- AC continued to monitor the suspension of field activities within the Navajo Nation.

### **Area Command Emphasis**

For the next operational period, the AC command emphasis will be:

- Positive and professional communications with stakeholders and response personnel.
- Well-being of response personnel.
- Response documentation and right-sizing guidance.
- Safety risk management and mitigation practices.

Note: The metrics provided in this Situation Report represent quantities reported for work completed on August 19 and/or August 20, 2015. Metrics table cells highlighted in yellow represent a change in quantities from the previous day's Situation Report.

## 1.0 Operations

### 1.1 Sampling Operations

The table below summarizes Operations sampling activities for August 19, 2015.

**Table 1- Operations Sampling Summary**

<b>Matrix</b>	<b>Region</b>	<b>August 20, 2015</b>	<b>Cumulative for Response*</b>
Private Drinking Water Well Samples	Region 8	15	296
	Region 6	46	259
	Region 9	0	0
Surface Water Samples	Region 8	8	182
	Region 6	10	140
	Region 9	1	140
Sediment Samples	Region 8	1	46
	Region 6	9	161
	Region 9	9	118

\*Note: Sample totals compiled from SCRIBE database. Totals include field samples and QA/QC samples. Cells highlighted in yellow represent changes in metrics from the previous day's Situation Report.

### 1.2 Water Distribution and Transportation Branch

Area Command continues to monitor potable water, agricultural water and agricultural food deliveries. EPA has purchased 1,120 cases of bottled water to hand out to the community. The table below provides a summary of public support activities completed as of August 20, 2015.

**Table 2- Public Support Summary**

Activity	Region	August 20, 2015		Cumulative	
		Deliveries	Quantity*	Deliveries	Quantity*
Potable Water Deliveries	Region 8	2	53,000	22	327,400
	Region 6	0	0	0	0
	Region 9	0**	0**	0**	0**
Livestock / Agricultural Water Deliveries	Region 8	0	0	47	141,980
	Region 6	0	0	59	1,104,990
	Region 9	0	0	53	834,000
Agricultural Food Deliveries	Region 8	0	0	0	0
	Region 6	0	0	1	244
	Region 9	0	0	1	384

Notes \* Water quantities are reported in gallons, food quantities are reported in bales of hay.  
 \*\*Water deliveries in Region 9 are being handled by the Navajo Tribal Utility Authority.  
 Cells highlighted in yellow represent changes in metrics from the previous day's Situation Report.

### 1.3 Community Engagements

The table below provides a summary of Community engagements reported for August 20, 2015.

**Table 3- Community Engagement Summary**

August 20, 2015		
Community Engagements	Region 8	1
	Region 6	0
	Region 9	0

#### 1.4 Anticipated VIP / Congressional Visits and Public Events

The table below summarizes upcoming anticipated Site visits and public events.

**Table 4- Anticipated Site Visits and Public Events Summary**

Unit	Planned Event	Anticipated Date
Area Command	Information meeting hosted by members of Senator Barasso's office, along with EPA and local agencies.	8-21-2015
	Meeting with La Plata County Commissioner's Office	8-21-2015
	Animas River Stakeholders Group Meeting	8-25-2015
Region 8		
	None scheduled.	N/A
Region 6		
	None scheduled.	N/A
Region 9		
	None scheduled.	N/A

#### 1.5 Community Relations Branch

EPA National Call Number (844-607-9700)- On August 20, 2015, the EPA National call number received **18** calls. As of August 20<sup>th</sup>, 2015, the national call number has received a total of **193** calls.

EPA Region 8- On August 20, 2015, their regional call center (970-385-8700) received **15** calls. Their regional call center has received a total of **778** calls. On August 19, 2015, the toll-free call in number received **13** inquiries related to Region 8. To date, EPA Region 8 has received **101** calls on the toll-free call in number.

EPA Region 6- On August 20, 2015 the toll-free call-in number received **3** inquiries related to Region 6. To date, EPA Region 6 has received **60** calls.

EPA Region 9- On August 20, 2015, the toll-free call in number received **2** inquiries related to Region 9. To date, EPA Region 9 has received **27** calls.

#### 2.0 Drinking Water System Impacts

No known water systems are currently impacted by the release or response operations.

### 3.0 Finance

#### 3.1 Estimated Response Costs to Date

The table below summarizes estimated total costs for the response as of August 21, 2015.

**Table 5- Estimated Response Costs Reported as of August 21, 2015**

REGION	EPA CUMULATIVE EXPENDED PAYROLL	EPA CUMULATIVE EXPENDED TRAVEL	EPA CUMULATIVE OTHER CHARGES	EPA CUMULATIVE CONTRACT COST	TOTAL CUMULATIVE COSTS
EPA REGION 8	\$736,807	\$72,113	\$0	\$1,179,010	\$1,987,930
EPA REGION 6	\$263,340	\$70,350	\$78,855	\$1,523,005	\$1,935,550
EPA REGION 9	\$290,160	\$45,500	\$0	\$363,496	\$699,156
TOTAL DAILY BURN	\$1,290,307	\$187,963	\$78,855	\$3,065,511	\$4,622,636

Note: Cells highlighted in yellow represent changes in metrics from the previous day's Situation Report.

#### 3.2 Estimated Burn Rates

The table below summarizes current estimated burn rates for the response.

**Table 6- Estimated Burn Rates as of August 21, 2015**

REGION	ESTIMATED BURN RATE
EPA REGION 8	\$152,918
EPA REGION 6	\$148,888
EPA REGION 9	\$53,781
TOTAL DAILY BURN	\$355,587

Note: Cells highlighted in yellow represent changes in metrics from the previous day's Situation Report.

#### **4.0 Participating Entities**

Federal, regional, local and other entities participating in the response are summarized below.

##### **Region 8**

US EPA  
USFWS  
US Coast Guard  
US Bureau of Reclamation  
Agency for Toxic Substances and Disease Registry (ATSDR)  
ERT  
Colorado Office of Emergency Management  
Southern Ute Indian Tribe (SUIT)  
Ute Mountain Ute Tribe  
La Plata County  
San Juan County  
Colorado Department of Public Health and Environment (CDPHE)  
Southwest IMT  
City of Durango  
Durango Fire Department  
San Juan County Health Department

##### **Region 6**

US EPA  
USFWS  
NMED  
ATSDR  
NM Department of Health  
NM Office of the State Engineer  
NM Department of Game and Fish  
County of San Juan □ New Mexico

##### **Region 9**

US EPA  
US Coast Guard  
Navajo Nation  
State of Colorado  
State of New Mexico  
State of Utah  
State of Arizona

## 5.0 Personnel On-Site

The table below summarizes staffing numbers for the federal entities and agencies active in the response.

**Table 7- Personnel On-Site as of August 20, 2015**

Region	Agency / Entity	Number of Personnel
Area Command	U.S. EPA	16
	US. EPA Contractors	3
	U.S. Coast Guard	3
EPA Region 8	U.S. EPA Region 8	23
	US. EPA Region 8 Contractors	33
	U.S. Coast Guard	7
	Other Federal, State, Local, and Tribal Entities	68
EPA Region 6	U.S. EPA Region 6	27
	US. EPA Region 6 Contractors	61
	U.S. Coast Guard	0
	Other Federal, State, Local, and Tribal Entities	0
EPA Region 9	U.S. EPA Region 9	10
	US. EPA Region 9 Contractors	21
	U.S. Coast Guard	8
	Other Federal, State, Local, and Tribal Entities	2
Total		282

Note: Cells highlighted in yellow represent changes in metrics from the previous day's Situation Report.

## 6.0 Critical Incident Stress Management (CISM)

AC has implemented a CISM program for all personnel involved with the response. On August 20, 2015, the CISM center received **27** visits from response personnel. To date, the CISM center has received **62** visits.

## 7.0 Source of Additional Information

For additional information, refer to [www.epa.gov/goldkingmine](http://www.epa.gov/goldkingmine)



**ATTACHMENT 1**  
**PRESS RELEASES**

No Press Releases included for August 21, 2015.

**ATTACHMENT 2**  
**REGIONAL SITUATION REPORTS**

U.S.	ENVIRONMENTAL	PROTECTION	AGENCY
	POLLUTION/SITUATION	REPORT	
2015	Gold King	Mine	Release SITREP



UNITED	STATES	ENVIRONMENTAL	PROTECTION	AGENCY
	Region	8		

Subject: Situation Report #13  
 Gold King Mine Release  
 San Juan County, CO  
 Latitude: 37.8945 Longitude: - - - 107.6384

From: Colorado Unified Command (Situation Unit)

Date: 08/21/2015  
 Reporting Period: 08/20/2015  
 Website: <http://www2.epa.gov/goldkingmine>

New information included in the SITREP is in **bold** text.

## Executive Summary

On August 5, while investigating the Gold King Mine release of mine wastewater into Cement Creek which feeds in coloring the Animas River a mustard - - orange as the leading edge of the release passed through Durango, Colorado August 8, 2015, it crossed the border into New Mexico Juan River. As the leading edge of the release River it became indistinguishable.

A Unified Command (UC) located in Durango, Colorado was mitigate contamination resulting from the release. The UC in Office of Emergency Management (OEM), Southern Ute Indian Basin Health Department has transitioned out of the UC to the UC. Currently San Juan County and the Ute the UC. The City of Durango and the Colorado Department (CDPHE) are providing Agency Representatives to the UC.

The EPA and CDPHE have been taking daily surface water Creek. Animas River sediment sampling has occurred. CDPHE drinking water supply systems. Upon request, the EPA has wells. The results of the sampling analysis are being completed irrigation ditch assessment and ditches were flushed irrigation use.

The Animas River reopened to recreational use mid - - day watercraft since August 6, 2015. The City of Durango's of the event and remained 4, off 2015 line all until irrigation Friday, August and available for irrigation use.

An EPA Area Command (AC) is also located in Durango between the EPA Regions 6, 8, and 9.

La Plata and San Juan counties still have active disaster issued 8/14/2015 by CDPHE for the Animas River remains

A Joint Information Center (JIC) and an EPA AC public coordinating support for the UC and the EPA AC response

## Introduction

### 1.0 Background

Site Number: Contract Nur  
D.O. Number: Action Memo  
Response Auth CERCLA Response Ty Emergency  
Response Lead EPA Incident Cate  
NPL Status: Operable Uni  
Mobilization D: 08/05/2015 Start Date: 08/0  
Demob Date: Completion [  
CERCLIS ID: RCRIS ID:  
ERNS No.: State Notifica: 08/0

### 2.0 Site Description

The Gold King Mine near Silverton, Colorado is a historic  
The mine has a continuous discharge of acidic mine d  
manganese, zinc, copper, and cadmium into the Cement Cre  
watershed. The Gold King Mine has not had maintenance  
workings have been inaccessible since 1995 when the mine

### 3.0 Description of Threat

Mine waste water was released into Cement Creek and  
based on US Geological Surveying (USGS) report, Cement Creek  
gallons. The initial environmental concern was the pulse of  
and metals discharged in Cement Creek which flows into  
and into New Mexico where it joins the San Juan

### 4.0 Critical Resource Needs

All resources are being tracked by the Resources Unit.  
ordered as needed to fill critical resource needs. There  
transitioning to new people over the next few days.

**5.0 Strategic Considerations**  
 United group of subject matter experts to advise policy

- 6.0 Incident Objectives**
1. Ensure health and safety of management personnel and response
  2. Identify criteria for lifting current health advisory.
  3. Continue implementation of the private well sampling plan
  4. Finalize demobilization plan.
  5. Facilitate transition to medium term sediment and river
  6. Continue coordination with State, Federal, Tribal and local jurisdictions.
  7. Continue management of adit discharge and discharge man
  8. Ensure continued access to mine - - site going without constraints
  9. Continue mine stabilization projects
  10. Implement Emergency Alert plan and continue development and warning system.
  11. Coordinate data sharing with local stakeholders.

## Current Activities

**7.0 Property Assessments**  
 The EPA is continuing property assessments, as needed, and currently 4 - - - 8 properties under consideration for targeted lin

**7.1 Surface Private Well Sampling and Sediment Sampling**  
 The EPA is regularly sampling locations as follows:

Cement Creek	-	1	
Animas River	upstream of confluence	1	with Cement Creek
Animas River	downstream of confluence		with Cement Creek
Animas River	through Durango	-	4

The EPA samples collected on 8/20/2015 are provided in

Matrix		Number Samples	Total Samples Collected
Potable Water		17	296
Sediment		0	182
Surface Water		8	46

\*Quality Assurance samples are included in these numbers.

The EPA is conducting private sampling as needed and provide the analytical results. It reported unclear their table caused by

by the mine release. Follow up work at the wells the well; resampling at the well; and taking an additional

The following table provides the private well information up

Quantity	Daily	Totals
Private well samples requested*	0	323
Private wells sampled (does not	15	282
Private wells with primary drinking	2	12
Remaining private wells to be		41

\*The well requests and remaining both lists duplicates requesters and requestors determined to be on city list.

## 7.2 Call Center

Call center totals are provided in the following table:

Topic	8/20/2015	To Date
Well Water T	5	365
Scheduling		
Water Concerns	2	108
Health Concerns	0	32
Recreation	0	21
Ecological Concerns	0	19
Livestock/Irrigation	0	19
Tourism/Media	4	63
Volunteer Offers	0	24
General Concerns	4	127
Daily Totals:	15	778

## 7.3 Water Distribution

On 8/20/15, 1120 cases of bottled water were available at the UC/AC facility for pickup by community. There were two made locations total of 53,000.

## 8.0 Colorado Department of Public Health and Environment

The CDPHE utilized field sampling teams CDPHE on 8/19/2015 return to scheduled watershed sampling in the area. Public water system their regular sample plans established by CDPHE.

## 9.0 Mine Division Response Actions

The EPA continues to operate and work on optimizing mine site that are treating water by lowering acidity



10.0 Water Treatment Plant  
 Caustic and flocculant going addition  
 Initiated pumping from Gold King Mine  
 Evaluated Gladstone area for potential water treatment pond locations

11.0 Water Quality Sampling  
 Water quality was collected at 11 time locations daily  
 Flow Rate of 647 GPM was recorded at 0930 from  
 Flow rate of 573 GPM was recorded at 1525 from  
 Teams observed turbidity above North Fork of Cement Cre

12.0 Gold King Mine  
 Mine stability consultants are on site.  
 Berm on GKM road was improved.  
 Began removing loose rock from the slope.  
 Gabion baskets are ready to be deployed.

13.0 Site Visits  
 NM Senator Barrasso staff visited GKM site.  
 Office of Inspector General (OIG) visited site.  
 Navajo representatives visited King Mine.

## Anticipated Activities

### 14.0 Durango Anticipated Activities

The EPA will be sampling the northern result fish pond to ditch  
 river diversion ditch. The headwater of the ditch was

### 15.0 Mine Division Anticipated Activities

15.1 Treatment in first pond will direct be treatment changed to c

15.2A survey of the King Mine waste . dump will be co

### 16.0 Other activities occurring in the area that are n

16.1 Bureau of Land Management (BLM) is conducting  
 San Miguel Power will remove damaged and power lines  
 remove poles at the Gold King Mine portal.

## Command and General Staff

### 17.1 Logistics Section

The UC ICP will be moved from the currenting fa  
the next operational period to of 8/26/2015 on Sunday The evening  
location is 135 Burnett ADr., Section, need CO. to Unit phone  
entire operation at the undaylose 8/26/2015. business on S

### 17.2 Finance Section

The EPA Region 8 total/2015 cost is \$1,539,527. of Thethe current  
(\$/day) \$1,649,740.

### 17.3 Safety Officer

Additional PPE and other safety equipment were obtained o  
day Thursday 8/20/2015. Dute toArea current Safety wesOfficer fi  
emphasize fire safety and awareness. Please refrain from  
and be sure all cigarette butts are extinguished prop  
motorized vehicle in tall, dry grassy areas. Due  
moderate particulate and pay special attentionrespiratorse with  
conditions.

You can contact your CISM team members at any  
Wendy Adams (R - - - 1532 425 466  
Tony Honnellio (R - - - 1): 617 947 - - - 4414

### 17.4 Liaison Officer

No report.

### 17.5 Information Officer

A public meeting was held at Miller Middle School

Social Media Sites being maintained by the UC JIC:  
Blog - goldkingminerelease.blogspot.com  
FB - facebook.com/goldkingminerelease  
Twitter - - - , @@Silverton601, @VisitSilverton  
YouTube Channel - Gold King Mine Release

As of - 07301 - - - 2015, 8 the blog had 1504 page haws 4  
likes, 22 shares, 0 comments, total views 298; and the

18.0

Weather

Forecast

Weather forecast for August 21 and 22, 2015:

DURANGO AREA

Today

Isolated showers and thunderstorms after noon. Widespread haze.  
Light and variable wind becoming west 10 to 15 mph

Tonight

A 10 percent chance of showers and thunderstorms, mainly  
with a low around 52. West wind 5 to 10 mph  
as 20 mph.

Saturday

A 10 percent chance of showers and thunderstorms after  
wind 5 to 10 mph becoming west in the afternoon.

Saturday Night

Partly cloudy, with a low around 53. Northwest wind  
midnight.

SILVERTON AREA

Today

Scattered showers and thunderstorms, mainly after 3pm. Widespread  
near 71. South wind 5 to 10 mph becoming west  
high as 25 mph. Chance of precipitation is 30%.

Tonight

A slight chance of showers and thunderstorms before 2am,  
thunderstorms after 5am. Partly cloudy, with a low around  
precipitation is 10%.

Saturday

A 30 percent chance of showers and thunderstorms, mainly  
with a high near 70. West wind 5 to 15 mph.

Saturday Night

A 10 percent chance of showers and thunderstorms before  
40. West wind around 5 mph becoming east after midnight.

19.0

Participating

Entities

19.1

EPA

Area

Command

The AC includes EPA Regions 6, 8 and 9. The  
is working with closely the New Mexico Environment Department  
is working with the Navajo Nation. The AC updates is on  
AC operational activities.

## 19.2 Unified Command and Cooperating Agencies

A Unified Command (UC) located in Durango, Colorado and mitigate contamination resulting from the release. The Colorado Office of Emergency Management (OEM), Southern County. San Juan Basin Health Department is an Agency of Durango and the Ute Mountain Ute Tribe are providing Agency Representatives to the UC. (CDPH) are

The southern Ute Indian has discontinued Animas River water project measure, the SUIT is continuing installing reverse osmosis on individual drinking well sampling results show any concerns

US Bureau of Reclamation (USBR) Technical Service Center the EPA road stabilization efforts in and around the

Total Personnel On Incident

Gold King Mine Release 2015	
	08/19/2015
Group	Number
EPA @ REOC	(12 on call
Contractors @ REOC	2
EPA in Field	10
EPA Contractors in Field	30
EPA Laboratory	0
Contractors Laboratory	1
USCG	7
ERT	1
Subtotal EPA Region	51 (+12

Personnel working at Colorado Unified Command Post on 08/20/15 (Does not include Area Command Personnel):

Position / Section	Number of
Unified Command	4
PIO	13
Safety	1
Operations	3
Planning (incl EIS/VL)	5
Logistics	1
Finance	2
Liaisons	0

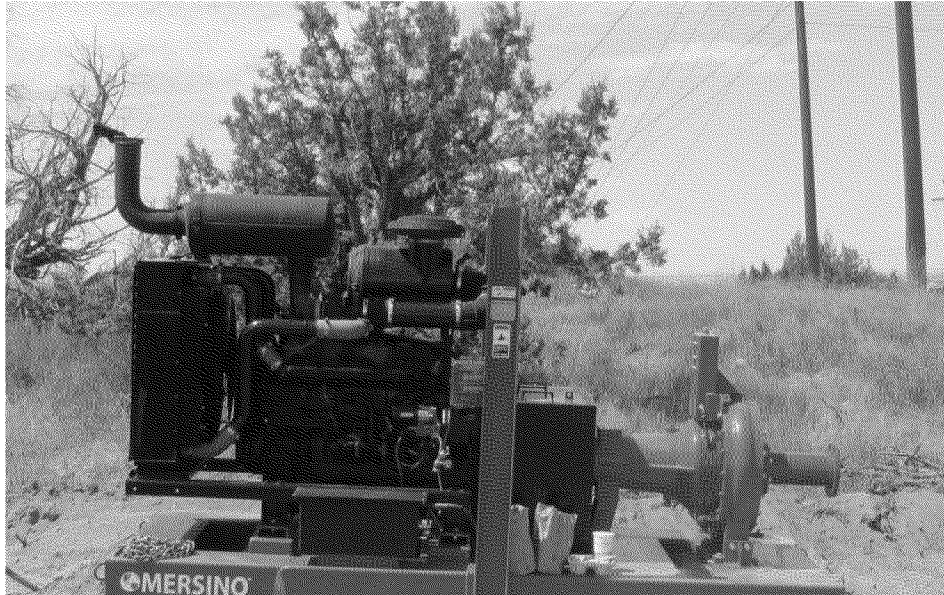
Agency Representatives/Administrators	1
Total	30

Organizations with individuals deployed to the response under  
Colorado OEM  
Southern Ute Tribe  
La Plata County  
San Juan County  
Colorado Department of Public Health and Environment  
State of Colorado resources: Southwest IMT, Northwest IMT,  
City of Durango  
San Juan Basin Health Dept.  
US Bureau of Reclamation  
US Bureau of Indian Affairs

**20.0 Definitions**

No new terms for this SITREP. Please see previous SIT

**U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Gold King Mine Spill - Region 6**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region VI**

**Subject: POLREP #14  
Gold King Mine Spill - Region 6**

**Various New Mexico locations, NM  
Latitude: 36.8374600 Longitude: -107.9916800**

**From: Ronnie Crossland, Region 6 Regional Incident Commander (RIC)**

**Date: 8/21/2015**

**Reporting Period: 8/20/2015 0700 – 8/20/2015 1900**

**1. Introduction**

**1.1 Description of Threat**

Region 8 reported approximately three million gallons of mine waste water was released into Cement Creek and the Animas River. The primary environmental concern is the pulse of contaminated water containing sediment and metals flowing as an orange-colored discharge downstream through Durango, Colorado, and into New Mexico and Utah.

## 1.2 Preliminary Removal Assessment/Removal Site Inspection Results

Water monitoring and sampling is ongoing at public water supply intakes and private wells and field pH levels and other water quality parameters are being monitored.

## 2. Current Activities

Headquarters has established a joint website at [www.epa.gov/goldkingmine](http://www.epa.gov/goldkingmine).

Created a new general public call-in number for Regions 6, 8, and 9: (844) 607-9700.

### 2.1 Operations Section

EPA continues to discuss the short and long term criteria with NMED, as proposed in their submission.

#### Data Posting to the Web

The following data has been posted on the [www.epa.gov/goldkingmine](http://www.epa.gov/goldkingmine) web site.

- Drinking Water Intake Surface Water Data from August 6 – 12<sup>th</sup>
- Drinking Water Intake Sediment Data from August 10 – 13<sup>th</sup>
- Irrigation Ditch Sediment Data from August 13<sup>th</sup>

#### Community Meeting/VIP

No Community Meetings or VIP visits are scheduled.

#### Toll-Free Number Activity

	8/20/15	Total to Date
Total Calls Received	18	172
Calls Concerning R6	3	60
Calls Returned by R6	0	57

The table below is a breakdown of the calls pertaining to Region 6. Of the eighteen Well Water Test Scheduling calls, seven of the citizens expressed gratitude for EPA's efforts in sampling.

TOPIC	DATE: 08/20/2015	OVERALL TOTALS
Well Water Test Scheduling	0	18
Water Concerns	1	8
Health Concerns	0	4
Livestock/Irrigation	0	4
Tourism/Media	0	1
Volunteer Offers	0	3
General Concerns	2	16
Contractor/Vendor Support	0	6
<b>Daily Totals:</b>	<b>3</b>	<b>60</b>

#### Private Drinking Water Well Sampling

EPA sampled forty-two private water wells on August 20, 2015. Two owners declined to have EPA resample their wells. EPA plans to sample fifteen wells on Friday, August 21, 2015. A few more wells will need to be sampled over the weekend.

Date	Number of Private Wells Resampled
8/19	38
8/20	42
<b>TOTAL</b>	<b>80 Distinct Wells</b>

EPA is drafting a letter to notify the private well owners about their test results from EPA's private well sampling when those results are available for reporting.

Date	Number of Private Wells Sampled
8/10	10
8/11	31
8/12	23
8/13	0 New Locations (38 re-samples)
8/14	35
8/15	15
<b>TOTAL</b>	<b>114 Distinct Wells</b>

NMED and DOH are hosting free well water testing on August 24-25, 2015. EPA will have a representative present at this event. Although this event is being held in San Juan County, it was scheduled prior to the incident. The testing is available to residents of Farmington and surrounding areas that are not connected to a public water utility.

#### Drinking Water Technical Support/Pretreatment/Connections

Morningstar has turned off the pump and is only processing water from their intake through the water treatment plant. Meanwhile, Morningstar is looking into asking Farmington for permission to connect to an 8" line under the hydrant.

#### Surface Water and Sediment Sampling

	8/20/2015	Total to Date
River Surface Water Samples	9	123
River Sediment Samples	9	100

#### Irrigation Ditch Sampling

The irrigation ditch sampling effort has been completed.

	Total to Date
Non-River Sediment/Soil Samples	59

#### Agriculture and Livestock Water



The agriculture and livestock team demobilized on August 20, 2015.

	<b>Total to Date</b>
Farmers Served	28
Gallons to Farmers	1,068,270
Livestock Farms Served	31
Gallons to Livestock Farms	36,720
Hay/Alfalfa Pickup	244 bales

## 2.2 Finance Section

### Daily Cost Estimates Report

<b>Funding Source</b>	<b>EPA Cumulative Expended Payroll</b>	<b>EPA Cumulative Expended Travel</b>	<b>EPA Cumulative Other Charges</b>	<b>Cumulative Contract Costs</b>	<b>TOTAL Cumulative Costs Expended</b>	<b>Estimated Daily Burn Rate</b>
<b>EPA</b>	<b>\$263,340.00</b>	<b>\$70,350.00</b>	<b>\$11,854.56</b>	<b>\$1,523,004.90</b>	<b>\$1,868,549.46</b>	<b>\$180,110.00</b>

## 3. Participating Entities in Region 6

US EPA  
 USFWS  
 NMED  
 ATSDR  
 NM Department of Health  
 NM Office of the State Engineer  
 NM Department of Game and Fish  
 County of San Juan – New Mexico

## 4. Personnel

<b>Group</b>	<b>Number</b>
Region 6 EPA @ REOC	14
Region 6 Contractors @ REOC	6
Region 6 Staff in JIC – Durango, CO	2
Region 6 Staff in Area Command – Durango, CO	1
Region 6 DD – Farmington, NM	1
Region 6 EPA OSC	3
Region 6/7 Water Technicians	6
Region 6 EPA Contractors in Field	55

U.S. ENVIRONMENTAL PROTECTION AGENCY  
 POLLUTION/SITUATION REPORT  
 San Juan River Response - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
 Region IX

**Subject:** POLREP #9  
 San Juan River Response

Shiprock, NM  
 Latitude: 36.8704828 Longitude: -108.7892506

**To:** Robert Wise, EPA Region 9

**From:** Kathleen Dillon, Situation Unit Leader

**Date:** 8/21/2015

**Reporting Period:**

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	<b>Contract Number:</b>
<b>D.O. Number:</b>	<b>Action Memo Date:</b>
<b>Response Authority:</b>	<b>Response Type:</b>
<b>Response Lead:</b>	<b>Incident Category:</b>
<b>NPL Status:</b>	<b>Operable Unit:</b>
<b>Mobilization Date:</b>	<b>Start Date:</b>
<b>Demob Date:</b>	<b>Completion Date:</b>
<b>CERCLIS ID:</b>	<b>RCRIS ID:</b>
<b>ERNS No.:</b>	<b>State Notification:</b>
<b>FPN#:</b>	<b>Reimbursable Account #:</b>

#### 1.1.1 Incident Category

#### 1.1.2 Site Description

The Gold King Mine near Silverton, Colorado is a historic gold mine at approximately 11,300' elevation. The mine has a continuous discharge of acidic mine drainage that is a significant contributor of manganese, zinc, copper, and cadmium into the Cement Creek drainage of the Animas River watershed. The Gold King Mine has not had maintenance of the mine workings since 1991, and the workings have been inaccessible since 1995 when the mine portal collapsed.

EPA Region 9 is focused on a stretch of the San Juan River extending from Farmington, NM to Mexican

Hat, UT.

### **1.1.2.1 Location**

San Juan County, NM and Navajo Reservation. The Animas River flows into the San Juan River at Farmington, NM. After the Animas River meets the San Juan River, the San Juan River continues to flow west through parts of New Mexico, Colorado, and Utah.

### **1.1.2.2 Description of Threat**

Mine waste water was released into Cement Creek and the Animas River. The volume of the release based on US Geological Survey (USGS) Cement Creek gauging station is estimated at three million gallons. The initial environmental concern was the pulse of contaminated water containing sediment and metals discharged in Cement Creek which flows into the Animas River through Durango, Colorado, and into New Mexico where it joins the San Juan River before flowing into Utah. The river is also used for recreational purposes, including fishing and rafting, and is an important cultural resource for the Navajo Nation.

The leading edge of the release reached the New Mexico border on August 8, 2015 where it eventually discharged into the San Juan River.

### **1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results**

Aerial and ground reconnaissance indicates that the plume associated with the Gold King Mine release has dissipated downstream. There is no leading edge of contamination visible in downstream sections of the San Juan River or Lake Powell.

EPA Region 9 is collecting and assessing water quality from the San Juan River from La Plata Highway in New Mexico to Mexican Hat in Utah. Water sampling is occurring, and pH levels and dissolved concentrations of metals are being monitored.

## **1.2 Incident Objectives**

### **1. Safety**

- Provide safe working environment for all response personnel.
- Identify safety issues and monitor adherence to Health and Safety Plan
- Ensure personnel receive adequate rest and time off

### **2. Sampling**

- Daily water and sediment sampling from 11 designated locations along the San Juan River
- Sampling from Lake Powell
- synchronize sampling data and information with Area Command

### **3. Water Replacement**

- Work with Navajo representatives to staff water points and organize distribution

### **4. Public Outreach**

- Coordinate public forum at which Navajo tribal leaders and community members can address Incident Command representatives.

## **2. Current Activities**

### **2.1 Operations Section**

#### **2.1.1 Narrative**

Community outreach and sampling along the San Juan River is on hold until further notice. The Glen Canyon ICP is demobilizing.

#### **2.1.2 Response Actions to Date**

## **Sampling Branch**

EPA Region 9 initiated water and sediment sampling efforts on August 9, 2015, to assess the impacts of the release at the Gold King Mine on the San Juan River. Starting on August 9, samples were gathered from the shoreline of the following 11 designated locations along the San Juan River:

### **New Mexico**

San Juan River at LaPlata Highway (SJLP)  
 PNM Intake (SJFP)  
 San Juan River at Hogback (SJHB)  
 San Juan River at Shiprock (SJSR)  
 San Juan DS from Shiprock (SJDS)  
 San Juan River at Four Corners (SJ4C)

### **Utah**

San Juan River at McElmo Creek (SJME)  
 San Juan at Montezuma Creek (SJMC)  
 San Juan River at Bluff Bridge (SJBB)  
 San Juan River at Mexican Hat (SJMh)  
 McElmo Creek Tributary (MECT)

Sample totals are summarized below:

August 8 - 4 water samples (SJLP, SJFP, SJHB & SJSR)  
 August 9 - 13 water samples (all sites)  
 August 10 - 12 water samples, 11 sediment samples (all sites)  
 August 11 - 13 water samples, 13 sediment samples (all sites)  
 August 12 - 13 water samples, 13 sediment samples (all sites)  
 August 13 - 12 water samples, 12 sediment samples (all sites)  
 August 14 - 12 water samples, 12 sediment samples (all sites)  
 August 15 - 12 water samples, 12 sediment samples (all sites)  
 August 16 - 12 water samples, 12 sediment samples (all sites)  
 August 17 - 12 water samples, 12 sediment samples (all sites)  
 August 18 - 10 water samples, 10 sediment samples (did not sample at SJSR or SJDS)  
 August 19 - 10 water samples, 10 sediment samples (did not sample at SJSR or SJDS)  
 August 20 - no samples collected

There have been no requests for well samples and no requests for samples from diversion channels.

## **Community Relations Branch**

Community outreach within the Navajo Reservation is on hold until further notice. Chapter meetings are summarized below:

8/10 - Oljeto, Aneth  
 8/12 - Shiprock  
 8/14 - Oljeto, Aneth  
 8/15 - Hogback, Nenahnezad, San Juan, Upper Fruitland,  
 8/16 - Mexcian Water, Gaadiiahi  
 8/17 - No meetings conducted  
 8/18 - Beclabito  
 8/19 - no meetings conducted  
 8/20 - no meetings conducted

### **Water and Feed Delivery Branch**

Water tank and feed delivery to Navajo Nation is on hold until further notice. A summary of water tank delivery for use for livestock and agriculture is as follows:

8/13 - 11,000 gallons of water delivered to Hal Chita, UT, 7,000 gallons of water delivered to Shiprock, NM  
 8/14 - 12 tanks (each 16,000 gallons) staged throughout Shiprock chapter  
 8/15 - 13 tanks (each 16,000 gallons) staged throughout various chapters of Navajo Nation.  
 8/16 - no change  
 8/17 - no change  
 8/18 - no change  
 8/19 - water and two tanks removed from Upper Fruitland  
 8/20 - no change

Tanks are located at the following positions:

Shiprock Rodeo Grounds  
 Gadiiaah Chapterhouse  
 Teec Nos Pos Chapterhouse  
 Mexican Water  
 Mexican Hat  
 Montezuma  
 Windmill 9T-227  
 Windmill 9T-225 (Red Mesa)  
 Windmill 01T-509  
 Windmill 02A-93  
 Anneth Chapter House  
 Monument Valley Welcome Center

A summary of feed delivered for livestock is as follows:

8/14 - 384 bales of alfalfa delivered to Gaadiiahi chapter

Seven bales of alfalfa are anticipated to be delivered today to the Beclabito, Hogback, Upper Fruitland, and Nenahnezad chapters.

### **Drinking Water System Impacts**

No known water systems in Region 9 have been impacted.

### **Glen Canyon, Arizona ICP**

Sampling started 8/14 among the following sites:

SJPL- San Juan River Plunge Line  
 SJPL2 - San Juan River Plunge Line, Second Location  
 SJCH -San Juan at Clay Hills  
 SJIN - San Juan River In-Flow  
 SJIN2 - San Juan River In-Flow, Second Location  
 LPPW - Lake Powell at Piute Wash  
 LPCH - Lake Powell at San Juan Arm  
 LPRC - Lake Powell at Rock Creek  
 LPGB - Lake Powell at Gregory Butte  
 LPPC - Lake Powell at Princess Cove  
 LPNC - Lake Powell at Navajo Canyon  
 LPDAM - Lake Powell at Glen Canyon am

Sample totals are summarized below:

8/14 - 2 water, 1 sediment (SJCH)  
 8/15 - 9 water, 6 sediment (SJPL, SJPL2, SJIN, SJIN2, LPPW, LPCH)  
 8/16 - 5 water, 4 sediment (LPRC, LPGB, LPPC, LPNC, LPDAM)  
 8/19 - 12 water, 10 sediment (all except SJCH)

Glen Canyon ICP OSC demobilized yesterday. Liaison Officer will demobilize today. One START contractor on scene has been integrated into the USCG/NPS 14-day expedition and will depart today with that team. The START contractor will focus sampling efforts during this trip on the San Juan River Gold King Mine related water and sediment quality influences on Lake Powell.

## **2.2 Planning Section**

### **2.2.1 Anticipated Activities**

All operations in Navajo Nation are on hold until further notice.

The Glen Canyon ICP is in the process of demobilization. The one START contractor out of this ICP has joined the USCG/NPS crew on scene and will embark on a 14 day float trip to collect a more robust sample set.

Feed is expected to be delivered to various Navajo chapters during this operational period and continuing in to the future.

#### **2.2.1.1 Planned Response Activities**

Sampling and public outreach on the Navajo Reservation is on hold.

#### **2.2.1.2 Next Steps**

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### **2.2.2 Issues**

On 17AUG15, at approximately 1130, seven members of the Farmington ICP response team were approached in the farmland area of Shiprock by a member of the Navajo Nation. The individual is in opposition to the response operations of Farmington ICP in regards to water and feed deliveries in the Shiprock Chapter. During the confrontation, the response personnel were threatened by being told their vehicles "would be stoned". They were also intimidated by a second vehicle that showed up in support of the individual. The response personnel listened to what the individual had to say and eventually left.

At approximately 1215, another incident occurred with the same individual at the bridge in Shiprock. There, the individual argued with 2 EPA employees and threatened to break their equipment. The individual left after a few minutes. In both cases the response personnel returned to the Farmington ICP and were unharmed.

An investigation is being conducted by the Navajo Department of Criminal Investigation.

Due to these events, for the safety of our response personnel, operations are on hold in the Shiprock Chapter.

On 19AUG15, a video was posted on social media that showed Navajo Nation President and Attorney General alleging contamination in one of the water tanks delivered by the EPA. Until further notice, responders will not sample or perform community outreach on Navajo Nation due to elevated risk to responder safety although operations are expected to resume during the next operational period.

## 2.3 Logistics Section

Requests from Navajo Nation for agriculture and livestock water and feed will be submitted to the Window Rock EOC via a ICS-213RR. Once signed, the request will be forwarded to the Farmington ICP where it will be processed.

## 2.4 Finance Section

### 2.4.1 Narrative

Yesterday, there was a burn rate of approximately \$6,397.39 for the ERRS contract through EQM (Environmental Quality Management, Inc.). A total of approximately \$294,168.00 is committed for upcoming operations.

START / Weston burn rate for 8/20 was estimated at \$40,000. This figure includes all overhead, activities conducted in the field, and lab analysis.

## 2.5 Other Command Staff

### 2.5.1 Safety Officer

With weather being forecasted into the 90s, hydration is of paramount importance. Additionally, much of the terrain surrounding the river is uneven and rocky. Responders should transit these areas with care.

While transiting throughout the region, responders should be mindful of the potential for contact with wildlife. Scorpions, snakes, and other similar animals raise a potential for injury.

### 2.5.2 Liaison Officer

Liaison officers are continuing outreach with Navajo community members and representatives of the Navajo Tribe.

### 2.5.3. Weather Forecast

Weather forecast for Friday, August 21

#### FARMINGTON AREA

##### *Today*

A mix of sun and clouds with a high of 91, low of 59 and 20% chance of precipitation. Wind coming out of the east at 12 miles per hour.

##### *Tonight*

No precipitation tonight. Partly cloudy, with a low around 58.

##### *Tomorrow*

Sunny with a high of 90, low of 58. No chance of precipitation.

## 3. Participating Entities

### 3.1 Area Command

EPA Region 9 is coordinating with EPA Regions 6 and 8, Navajo Nation, and the states of Colorado, New Mexico, Utah, and Arizona. The EPA Region 9 is working with the Navajo Nation to evaluate possible impacts to the Tribe. Potentially impacted water systems have been notified, and precautions are in place to ensure drinking water is protected. The EPA and New Mexico Environmental Department are providing assistance to community water systems and closely monitoring the situation. EPA Region 9 has contacted the Bureau of

Indian Affairs regarding potential impacts to the Navajo Nation and is currently working with Navajo liaisons.

### **3.2 Unified Command and Cooperating Agencies**

The UC includes EPA Region 9 and United States Coast Guard. Bret Moxley has assumed the role of Incident Commander.

## **4. Personnel On Site**

EPA - 10  
EPA START - 16  
ERRS - 5  
USCG - 8  
Navajo Liaisons - 2

## **5. Definition of Terms**

No information available at this time.

## **6. Additional sources of information**

### **6.1 Internet location of additional information/report**

[www.epa.gov/goldkingmine](http://www.epa.gov/goldkingmine)

## **7. Situational Reference Materials**

No information available at this time.